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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,561	09/30/2003	Natan Vishlitzky	07072-120002 / EMC 99-009	9960
26161	7590	01/30/2006	EXAMINER KIM, HONG CHONG	
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			ART UNIT 2185	
PAPER NUMBER				
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/675,561

Applicant(s)

VISHLITZKY ET AL.

Examiner

Hong C. Kim

Art Unit

2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/22/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1. Claims 1-6 are presented for examination. This office action is in response to the application filed on 9/30/03.

2. Applicants are requested to update the status of the related U.S. patent application accordingly (e.g., U.S. Patent Application Serial No. ####,### filed Sept. 07, 1990, now abandoned; ..., now U.S. Patent #,###,### issued Jan. 01, 1994; or This application is a continuation of Serial Number ####,###, filed on December 01, 1990, now abandoned; ...etc.). Also applicants are requested to include the status of the related U.S. applications or patents in the CROSS-REFERENCE TO RELATED APPLICATIONS section and in any other corresponding area in the specification, if any.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 9/22/2004 is being considered by the examiner.

The examiner requests, in response to this Office action, any reference(s) known to qualify as prior art under 35 U.S.C. sections 102 or 103 with respect to the invention as defined by the independent and dependent claims. That is, any prior art (including any products for sale) similar to the claimed invention that could reasonably be used in a 102 or 103 rejection. This request does not require applicant to perform a search.

This request is not intended to interfere with or go beyond that required under 37 C.F.R. 1.56 or 1.105.

The request may be fulfilled by asking the attorney(s) of record handling prosecution and the inventor(s)/assignee for references qualifying as prior art. A simple statement that the query has been made and no prior art found is sufficient to fulfill the request. Otherwise, the fee and certification requirements of 37 CFR section 1.97 are waived for those documents submitted in reply to this request. This waiver extends only to those documents within the scope of this request that are included in the application's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this request and any information disclosures beyond the scope of this are subject to the fee and certification requirements of 37 CFR section 1.97.

In the event prior art documentation is submitted, a discussion of relevant passages, figs. etc. with respect to the claims is requested. The examiner is looking for specific references to 102/103 prior art that identify independent and dependent claim limitations. Since applicant is most knowledgeable of the present invention and submitted art, his/her discussion of the reference(s) with respect to the instant claims is essential. **A response to this inquiry is greatly appreciated.**

The examiner also requests, in response to this Office action, support be shown for language added to any original claims on amendment and any new claims. That is, indicate support for newly added claim language by specifically pointing to

page(s) and line number(s), in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application.

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The title should be more specific to differentiate the invention from similar inventions in the patent literature. A check value to verify that the record is from the particular storage location aspect of the invention should be mentioned in the title so that the title is more descriptive.

Drawings

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the check value must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

DOUBLE-PATENTING

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 6,629,199. Claims of patent No. 6,629,199 contains every element of claims 1-6 of the instant application and as such anticipates claims 1-6 of the instant application.

Claim Objections

7. Claims 1-3 are objected to because of the following informalities:

As to claim 1, in line 2, it appears that --at least one-- should be added before "storage element comprising" for clarity.

As to claim 1, in line 7, there is insufficient antecedent basis for "the device" limitation in the claim.

As to claim 1, in line 9, there is insufficient antecedent basis for "said storage elements" limitation in the claim.

As to claim 1, in line 9, it is unclear what is different between "a descriptor" in line 5 and "a descriptor" in line 9.

As to claim 1, in lines 12, 13, 14, 16 and 19, it appears that --plurality of -- should be added before "records" for clarity.

As to claim 1, in line 15, it is unclear whether "the descriptor" is referring to "a descriptor" in line 5 or "a descriptor" in line 9.

As to claim 2, in line 4, there is insufficient antecedent basis for "the generated descriptor" limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-6 are rejected under 35 USC § 103(a) as being unpatentable over Yeger et al. (Yeger) US Patent No. 5809435 or Vishlitzky US Patent No. 6029229 in view of Fukuda et al. (Fukuda) US Patent No. 4,698,810 or Sze US Patent No. 6,092,231.

As to claim 1, Yeger discloses the invention as claimed. Yeger discloses a digital data storage system comprising: at least one storage element, the storage element

comprises a plurality of storage locations each configured to retrievably store a record, the at least one storage element being configured to retrievably store a series of records (Figs. 2 and 3), a memory configured to store associated with each storage location associated with a descriptor (Figs. 2 and 3), and a cache memory comprising a plurality of cache slots and a control device for cache and a pointer and the records from the same storage elements are stored in the same cache slot (Figs.2 and 3 cols 7-11).

Alternatively, Vishlitzky discloses the invention as claimed. Vishlitzky discloses a digital data storage system comprising: at least one storage element, the storage element comprises a plurality of storage locations each configured to retrievably store a record, the at least one storage element being configured to retrievably store a series of records (Figs. 2 and 3), a memory configured to store associated with each storage location associated with a descriptor (Figs. 2 and 3), and a cache memory comprising a plurality of cache slots and a control device for cache and a pointer and the records from the same storage elements are stored in the same cache slot (Figs.1 and 2, col. 4-9).

However, neither Yeger nor Vishlitzky specifically discloses the descriptor having a check value for the record stored in the respective storage location associated with the descriptor and a control device configured to, initiate retrieval of one of the record, and use the check value from the descriptor to verify that the one of the associated with the one of the records is from the one of the storage locations identified in the retrieval request.

Fukuda discloses the descriptor having a check value (col. 5 lines 22-28 and col. 6 lines 2-3) for the record stored in the respective storage location associated with the descriptor and a control device configured to, initiate retrieval of one of the record, and use the check value from the descriptor to verify that the one of the associated with the one of the records is from the one of the storage locations identified in the retrieval request (col. 6 lines 10-18) for the purpose of reducing the amount erroneous data sent to the host computer and thereby avoiding the problem of the host trying to process the erroneous data which could result in breakdowns software application errors and undesirable delays (col. 6 lines 1-19).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the descriptor having a check value for the record stored in the respective storage location associated with the descriptor and a control device configured to, initiate retrieval of one of the record, and use the check value from the descriptor to verify that the one of the associated with the one of the records is from the one of the storage locations identified in the retrieval request as taught by Fukuda into the invention of Yeger or Vishlitzky for the advantages stated above.

Alternatively, neither Yeger nor Vishlitzky specifically discloses the descriptor having a check value for the record stored in the respective storage location associated with the descriptor and a control device configured to, initiate retrieval of one of the

record, and use the check value from the descriptor to verify that the one of the associated with the one of the records is from the one of the storage locations identified in the retrieval request.

However, Sze discloses the descriptor having a check value (Fig. 1 and Fig. 2 Ref. 144) for the record stored in the respective storage location associated with the descriptor and a control device configured to, initiate retrieval of one of the record, and use the check value from the descriptor to verify that the one of the associated with the one of the records is from the one of the storage locations identified in the retrieval request (col. 3 lines 42-47) for the purpose of reducing the amount erroneous data sent to the host computer and thereby avoiding the problem of the host trying to process the erroneous data which could result in breakdowns software application errors and undesirable delays (col. 3 lines 5-16 and 42-47).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the descriptor having a check value for the record stored in the respective storage location associated with the descriptor and a control device configured to, initiate retrieval of one of the record, and use the check value from the descriptor to verify that the one of the associated with the one of the records is from the one of the storage locations identified in the retrieval request as taught by Sze into the invention of Yeger or Vishlitzky for the advantages stated above.

As to claim 4, the claim 4 encompasses the same scope of the invention as that of the claim 1. Therefore, the claim 4 is rejected for the same reason as the claim 1.

As to claims 2 and 5, Fukuda further discloses a check value and generate check value and store the generated check value in the descriptor on the memory (col. 5 lines 21 through col. 6 lines 18). Sze further discloses a check value and generate check value and store the generated check value in the descriptor on the memory (col. 1 lines 13-28 and col. 3 lines 5+).

As to claims 3 and 6, Fukuda further discloses a check value and generate check value (col. 5 lines 21 through col. 6 lines 18). Sze further discloses a check value and generate check value (col. 1 lines 13-28 and col. 3 lines 5+). Yeger further discloses updating a cache memory (Figs. 2 & 3 cols. 7-11). Vishlitzky further discloses updating a cache memory (Figs. 1 and 2 cols. 4-9).

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892.
2. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) days from the mail date of this letter. Failure to respond within the

period for response will result in **ABANDONMENT** of the application (see 35 USC 133, MPEP 710.02, 710.02(b)).

3. When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. ' 1.111(c).

4. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Kim whose telephone number is (571) 272-4181. The examiner can normally be reached on M-F 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 whose telephone number is (571) 272-2100.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

7. **Any response to this action should be mailed to:**

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

or faxed to TC-2100:
571-273-8300

Hand-delivered responses should be brought to the Customer Service Window (Randolph Building, 401 Dulany Street, Alexandria, VA 22314).

HK
Primary Patent Examiner
January 23, 2006

